

Sequence listing

<110> Pieris Proteolab AG

<120> Soluble truncated polypeptides of the Nogo-A protein, methods for the production of such polypeptides and methods for identifying compounds having detectable affinity to a Nogo-A protein

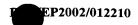
<160> 18 <210> 1 <211> 1163 <212> PRT <213> rat <220> <223> rat Nogo-A protein <400> 1 Met Glu Asp Ile Asp Gln Ser Ser Leu Val Ser Ser Ser Thr Asp Ser Pro Pro Arg Pro Pro Pro Ala Phe Lys Tyr Gln Phe Val Thr Glu Pro Glu Asp Glu Glu Asp Glu Glu Glu Glu Glu Asp Glu Glu Glu Asp Asp Glu Asp Leu Glu Glu Leu Glu Val Leu Glu Arg Lys 50 Pro Ala Ala Gly Leu Ser Ala Ala Ala Val Pro Pro Ala Ala Ala Ala Pro Leu Leu Asp Phe Ser Ser Asp Ser Val Pro Pro Ala Pro 80 85 Arg Gly Pro Leu Pro Ala Ala Pro Pro Ala Ala Pro Glu Arg Gln 95 1.00 Pro Ser Trp Glu Arg Ser Pro Ala Ala Pro Ala Pro Ser Leu Pro 110 115 120 Pro Ala Ala Ala Val Leu Pro Ser Lys Leu Pro Glu Asp Asp Glu 125 130 Pro Pro Ala Arg Pro Pro Pro Pro Pro Ala Gly Ala Ser Pro 140 145 150 Leu Ala Glu Pro Ala Ala Pro Pro Ser Thr Pro Ala Ala Pro Lys 155 160 Arg Arg Gly Ser Gly Ser Val Asp Glu Thr Leu Phe Ala Leu Pro 170 175 Ala Ala Ser Glu Pro Val Ile Pro Ser Ser Ala Glu Lys Ile Met 185 190

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Thr	Leu	Asn	Glu	Ala 260	Ser	Lys 	Glu	Leu	Pro 265	Glu	Arg	Ala	Thr	Asn 270
Pro	Phe	Val	Asn	Arg 275	Asp	Leu	Ala	Glu	Phe 280	Ser	Glu	Leu	Glu	Tyr 285
Ser	Glu	Met	Gly	Ser 290	Ser	Phe	Lys	Gly	Ser 295	Pro	Lys	Gly	Glu	Ser 310
Ala	Ile	Leu	Val	Glu 305	Asn	Thr	Lys	Glu	Glu 310	Val	Ile	Val	Arg	Ser 315
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Gln	Glu	Ser	Pro	Val 335	Gly	Lys	Glu	Asp	Arg 340	Val	Val	Ser	Pro	Glu 345
Lys	Thr	.Met	Asp	Ile 350	Phe	Asn	Glu	Met	Gln 355	Met	Ser	Val	Val	Ala 360
Pro	Val	Arg	Glu	Glu 365	Tyr	Ala	Asp	Phe	Lys 370	Pro	Phe	Glu	Gln	Ala 375
Trp	Glu	Val	Lys	Asp 380	Thr	Tyr	Glu	Gly	Ser 385	Arg	Asp	Val	Leu	Ala 390
Ala	Arg	Ala	Asn	Val 395	Glu	Ser	Lys	Val	Asp 400	Arg	Lys	Cys	Leu	Glu 405
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Ser	Ser	Arg	Ala	Tyr 440	Ile	Thr	Cys	Ala	Ser 445	Phe	Thr	Ser	Ala	Thr 450
Glu	Ser	Thr	Thr	Ala 455	Asn	Thr	Phe	Pro	Leu 460	Leu	Glu	Asp	His	Thr 465
Ser	Glu	Asn	Lys	Thr 470	Asp	Glu	Lys	Lys	Ile 475	Glu	Glu	Arg	Lys	Ala 480
Gln	Ile	Ile	Thr	Glu 485	ГЛЗ	Thr	Ser	Pro	Lys 490	Thr	Ser	Asn	Pro	Phe 495
Leu	Val	Ala	Val	Gln 500	ýsb	Ser	Glu	Ala	Asp 505	Tyr	Val	Thr	Thr	Asp 510
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WO 2004/039836

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Leu	Leu	Ile	Leu	Ala 1115		Ile	Ser	Leu	Phe 1120		Ile	Pro	Va1	Ile 1125
Tyr	Glu	Arg	His	Gln 1130		Gln	Ile	qaA	His 1135		Leu	Gly	Leu	Ala 1140
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1150

1155

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65 70 75

Ala Pro Leu Met Asp Phe Gly Asn Glu Phe Val Pro Pro Ala Pro 80 85 90

Arg Gly Pro Leu Pro Ala Ala Pro Pro Val Ala Pro Glu Arg Gln
95 100 105

Pro Ser Trp Asp Pro Ser Pro Val Ser Ser Thr Val Pro Ala Pro 110 115 120

Ser Pro Leu Ser Ala Ala Ala Val Ser Pro Ser Lys Leu Pro Glu 125 130 135

Asp Asp Glu Pro Pro Ala Arg Pro Pro Pro Pro Pro Pro Ala Ser 140 145 150

Val Ser Pro Gln Ala Glu Pro Val Trp Thr Pro Pro Ala Pro Ala 155 160 165

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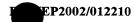
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Ser	Thr	Val	Leu	Pro 260	Thr	Glu	Gly	Thr	Leu 265	Gln	Glu	Asn	Val	Ser 270
Glu	Ala	Ser	Lys	Glu 275	Val	Ser	Glu	Lys	Ala 280	Lys	Thr	Leu	Leu	Ile 285
Asp	Arg	Asp	Leu	Thr 290	Glu	Phe	Ser	Glu	Leu 295	Glu	Tyr	Ser	Glu	Met 300
Gly	Ser	Ser	Phe	Ser 305	Val	Ser	Pro	Lys	Ala 310	Glu	Ser	Ala	Val	Ile 315
Val	Ala	Asn	Pro	Arg 320	Glu	Glu	Ile	Ile	Val 325	Lys	Asn	Lys	Asp	Glu 330
Glu	Glu	Lys	Leu	Val 335	Ser	Asn	Ans	Ile	Leu 340	His	Asn	Gln	Gln	Glu 345
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Glu	Arg	Val	Trp	Glu 395	Val	Lys	Asp	Ser	Lys 400	Glu	Asp	Ser	Asp	Met 405
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Pro	Glu	Gly	Ile	Lys 455	Asp	Arg	Pro	Gly	Ala 460	Tyr	Ile	Thr	Суз	Ala 465
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		860				865				870
Phe Pro Thr	Leu	Ile Ser 875	s Ser	. ŗŽs	Thr	Asp Ser 880	Phe	Ser	Lys	Leu 885
Ala Arg Glu	Tyr	Thr Asp 890) Leu	Glu	Val	Ser His	. Lys	Ser	Glu	Ile 900
Ala Gln Ala	Pro	Asp Gly 905	/ Ala	Gly	Ser	Leu Pro	Cys	Thr	Glu	Leu 915
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Phe Gly Ala	Ser	Len Phe	T.011	T.OU	T ON	Cor Tou	m1			C
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40

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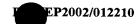
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Asn Tyr Trp Leu Gly Trp Val Lys Gln Arg Pro Gly His Gly Leu
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                                      40
Glu Trp Ile Gly Asp Ile Tyr Pro Gly Gly Gly Tyr Thr Asn Tyr
Asn Glu Lys Phe Lys Gly Lys Ala Thr Leu Thr Ala Asp Thr Ser
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Ser Ser Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp
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12

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Leu Leu Ile Tyr Gly Ala Thr Asn Leu Ala Asp Gly Met Ser Ser 50 55 60

Arg Phe Ser Gly Ser Gly Ser Gly Arg Gln Tyr Ser Leu Lys Ile
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Ile Asn Arg Val Pro Val Thr Phe Gly Ala Gly Thr Lys Leu Glu 95 100 105

Ile Lys

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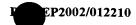
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<223> Strep-tag II affinity tag

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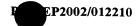
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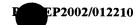
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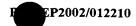
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17

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21

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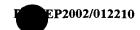
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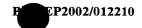
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gaa Glu	tct Ser	gaa Glu 500	cca Pro	gtt Val	gac Asp	tta Leu	ttt Phe 505	agt Ser	gat Asp	gat Asp	tcg Ser	att Ile 510	cct Pro	gaa Glu	1620
gtc Val	cca Pro	caa Gln 515	aca Thr	caa Gln	gag Glu	gag Glu 	gct Ala 520	gtg Val	atg Met	ctc Leu	atg Met	aag Lys 525	gag Glu	agt Ser	1665

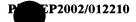


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gag Glu	ttt Phe	aat Asn 590	act Thr	gca Ala	att Ile	tat Tyr	tca Ser 595	aat Asn	gat Asp	gac Asp	tta Leu	ctt Leu 600	tct Ser	tct Ser	1890
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gat Asp	gat Asp	tct Ser 635	cct Pro	aaa Lys	tta Leu	gcc Ala	aag Lys 640	gag Glu	tac Tyr	act Thr	gat Asp	cta Leu 645	gaa Glu	gta Val	2025
tcc Ser	gac Asp	aaa Lys 650	agt Ser	gaa Glu	att Ile	gct Ala	aat Asn 655	atc Ile	caa Gln	agc Ser	GJÀ aaa	gca Ala 660	gat Asp	tca Ser	2070
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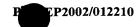


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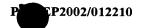


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Thr	Glu	Pro 515	Ser	Pro	Asp	Phe ·	Ser 520	Asn	Tyr	Ser	Glu	Ile 525	Ala	Lys
Phe	Glu	Lys 530	Ser	Val	Pro	Glu	His 535	Ala	Glu	Leu	Val	Glu 540	Asp	Ser
Ser	Pro	Glu 545	Ser	Glu	Pro	Val	Asp 550	Leu	Phe	Ser	Ąsp	Asp 555	Ser	Ile
Pro	Glu	Val 560	Pro	Gln	Thr	Gln	Glu 565	Glu	Ala	Val	Met	Leu 570	Met	Lys
Glu	Ser	Leu 575	Thr	Glu	Val	Ser	Glu 580	Thr	Val	Ala	Gln	His 585	Lys	Glu
Glu	Arg	Leu 590	Ser	Ala	Ser	Pro	Gln 595	Glu	Leu	Gly	Lys	Pro 600	Tyr	Leu
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Ser Ser Ala Glu Asp	Ser Ser Lys Val	635 Lys 650 Pro 665 Asp 680 Ser 695 Leu 710	Glu Ile Asp Asp	Asp Glu Ser Lys	Lys Ile Pro Ser	Ile Ile Lys Glu	640 Lys 655 Asp 670 Leu 685 Ile 700 Leu 715	Glu Glu Ala Ala Pro	Ser Phe Lys Asn Cys	Glu Pro Glu Ile Asp	Thr Thr Tyr Gln Leu	Phe 660 Phe 675 Thr 690 Ser 705 Ser 720	Ser Val Asp Gly	Asp Ser Leu Ala
Ser Ser Ala Glu Asp	Ser Ser Lys Val Ser	635 Lys 650 Pro 665 Asp 680 Ser 695 Leu 710	Glu . Ile Asp Asp Pro	Asp Glu Ser Lys	Lys Ile Pro Ser Leu Asp	Ile Ile Lys Glu Glu	640 Lys 655 Asp 670 Leu 685 Ile 700 Leu 715 Val 730	Glu Glu Ala Ala Pro	Ser Phe Lys Asn Cys	Glu Pro Glu Ile Asp	Thr Thr Tyr Gln Leu Asp	Phe 660 Phe 675 Thr 690 Ser 705 Ser 720 Glu 735	Ser Val Asp Gly Phe	Asp Ser Leu Ala Lys
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Pro Glu Arg Ala Thr Asn Pro Phe Val Asn Arg Asp Leu Ala Glu
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Ser Pro Lys Gly Glu Ser Ala Ile Leu Val Glu Asn Thr Lys Glu
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Lys Pro Phe Glu Gln Ala Trp Glu Val Lys Asp Thr Tyr Glu Gly
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Lys	Asp	Ser 185	Glu	Gly	Arg	Asn	Glu 190	Asp	Ala	Ser	Phe	Pro 195	Ser	Thr
Pro	Glu	Pro 200	Val	Lys	Asp	Ser	Ser 205	Arg	Ala	Tyr	Ile	Thr 210	Суз	Ala
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		Pro 425					430					435		
		Ile 440					445					450		
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Ser	Asn	Asp 560	Ile	Pro	Thr	Leu	Thr 565	Lys	Lys	Glu	Lys	Ile 570	Ser	Leu
Gln	Met	Glu 575	Glu	Phe	Asn	Thr	Ala 580	Ile	Tyr	Ser	Asn	Asp 585	Asp	Leu
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